

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of claims:**

Claims 1-26 (canceled).

5           Claim 27 (new): A method for transferring data according to an ARQ methodology comprising:

transferring data is transferred from a transmitter to a receiver in the form of data packets wherein at least one repeat data packet is transferred by the transmitter to the receiver after transmission of a data packet when a corresponding request is  
10           issued by the receiver, and the bits to be transferred in the data packet and at least one repeat data packet are subjected to bit rate adaptation before they are transferred from the transmitter to the receiver;

utilizing one or more bit rate adaptation models for bit rate adaptation, including using parameters of the one or more bit rate adaptation models for  
15           calculation of the bit rate adaptation; and

signaling at least one of the one or more bit rate adaptation models from the transmitter to the receiver for use in differentiating between self-decoding and non-self-decoding data packets.

20           Claim 28 (new): A method as defined in claim 27, wherein the differentiation according to self-decoding and non-self-decoding data packets is signaled only in the case of puncturing, but not in the case of repetition.

Claim 29 (new): A method as defined in claim 27, wherein at least two  
25           different bit rate adaptation models are signaled.

Claim 30 (new): A method as defined in claim 27, wherein a total number of possible signaled bit rate adaptation models for self-decoding or non-self-decoding data packets in the case of puncturing is the same as the number in the  
30           case of repetition.

Claim 31 (new): A method as defined in claim 27, wherein for cases of puncturing, one bit is provided for indicating a self-decoding or non-self-decoding data packet and n-1 bits are provided for indicating different bit rate adaptation models, and, in cases of repetition, n bits are provided for indicating different bit rate adaptation models.

Claim 32 (new): A method as defined in claim 27, wherein two bits are provided in cases of puncturing, and three bits are provided in cases of repetition to indicate different bit rate adaptation models.

Claim 33 (new): A method as defined in claim 27, wherein different bit rate adaptation models are used for bit rate adaptation of the data packet and the repeat data packet, so that bits with an identical information source are transferred from the transmitter to the receiver after bit rate adaptation is carried out at different places in the data packet and in the repeat data packet.

Claim 34 (new): A method as defined in claim 27, further comprising:  
dividing the bits of a channel-coded bit stream into two or more partial bit streams;  
subjecting each individual partial bit stream to a separate bit rate adaptation process for the purpose of bit rate adaptation; and  
recombining the bits of the individual partial bit streams with one another after the corresponding bit rate adaptation for the data packet or repeat data packet has been carried out.

Claim 35 (new): A method as defined in claim 34, further comprising:  
combining the bits of the individual partial bit streams with one another proportionately after the corresponding bit rate adaptation for the data packet or repeat data packet has been carried out.

Claim 36 (new): A method as defined in claim 27, wherein the bit rate adaptation model used for the repeat data packet is modified compared to the bit rate adaptation model used for the data packet, in that when a QAM modulation of the bits to be transferred is carried out, bits with identical information content are mapped with regard to the repeat data packet onto different points in the QAM signal area than for the originally transmitted data packet.

Claim 37 (new): A method as defined in claim 27, wherein bit rate adaptation is carried out with the aid of a bit rate adaptation algorithm, which punctures or repeats the bits of the data packet or repeat data packet depending on the value of a corresponding rate adaptation parameter ( $e_{ini}$ ), whereby the value of the rate adaptation parameter ( $e_{ini}$ ) is modified for the bit rate adaptation of the bits in the repeat data packet compared to the bit rate adaptation of the bits in the data packet.

Claim 38 (new): A method as defined in claim 37, wherein the bit rate adaptation algorithm is configured such that it selects the bits to be punctured or repeated using an error variable ( $e$ ), whereby said error variable ( $e$ ) is initialized with the value of the rate adaptation parameter ( $e_{ini}$ ) at the start of the rate adaptation algorithm.

Claim 39 (new): A method as defined in claim 27, wherein different bit rate adaptation models are used when several repeat data packets are requested by the receiver for bit rate adaptation of the bits in the individual repeat data packets.

Claim 40 (new): A method for transferring data according to an ARQ methodology comprising:

transferring data from a transmitter to a receiver in the form of data packets, wherein at least one repeat data packet is transferred to the receiver by the transmitter after transmission of a data packet when a corresponding request is issued by the receiver;

subjecting bits to be transferred in the data packet or the at least one repeat data packet to bit rate adaptation by puncturing or repetition before they are transferred from the transmitter to the receiver, wherein the bit rate adaptation is carried out according to a bit rate adaptation model; and

5           signaling the bit rate adaptation model, including parameters for calculating the bit rate adaptation model, from the transmitter to the receiver, wherein a signal is sent from the transmitter to the receiver to indicate whether the data packet is self-decoding or non-self-decoding when bit rate adaptation is accomplished by puncturing.

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Claim 41 (new): A method as defined in claim 40, wherein no signal is sent from the transmitter to the receiver to indicate whether a data packet is self-decoding or non-self-decoding when the bit rate adaptation is accomplished by repetition.

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Claim 42 (new): A method as defined in claim 40, wherein a transmission resource used in the case of puncturing in order to signal whether a self-decoding or non-self-decoding data packet is being transferred, is alternately used in the case of bit rate adaptation accomplished by repetition to signal from the transmitter to the receiver the bit rate adaptation model, including parameters for calculating the bit rate adaptation model,.

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Claim 43 (new): A method as defined in claim 40, wherein at least two different bit rate adaptation models are signaled.

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Claim 44 (new): A method as defined in claim 40, wherein a total number of possible signaled bit rate adaptation models for self-decoding or non-self-decoding data packets in the case of puncturing is the same as the number in the case of repetition.

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Claim 45 (new): A method as defined in claim 40, wherein for cases of puncturing, one bit is provided for indicating a self-decoding or non-self-decoding data packet and n-1 bits are provided for indicating different bit rate adaptation models, and, in cases of repetition, n bits are provided for indicating different bit rate adaptation models.

Claim 46 (new): A method as defined in claim 40, wherein two bits are provided in cases of puncturing, and three bits are provided in cases of repetition to indicate different bit rate adaptation models.

Claim 47 (new): A method as defined in claim 40, wherein different bit rate adaptation models are used for bit rate adaptation of the data packet and the repeat data packet, so that bits with an identical information source are transferred from the transmitter to the receiver after bit rate adaptation is carried out at different places in the data packet and in the repeat data packet.

Claim 48 (new):. A method as defined in claim 40, further comprising:  
dividing the bits of a channel-coded bit stream into two or more partial bit streams;  
subjecting each individual partial bit stream to a separate bit rate adaptation process for the purpose of bit rate adaptation; and  
recombining the bits of the individual partial bit streams with one another after the corresponding bit rate adaptation for the data packet or repeat data packet has been carried out.

Claim 49 (new): A method as defined in claim 40, further comprising:  
combining the bits of the individual partial bit streams with one another proportionately after the corresponding bit rate adaptation for the data packet or repeat data packet has been carried out.

Claim 50 (new): A method as defined in claim 40, wherein the bit rate adaptation model used for the repeat data packet is modified compared to the bit rate adaptation model used for the data packet, in that when a QAM modulation of the bits to be transferred is carried out, bits with identical information content are mapped with regard to the repeat data packet onto different points in the QAM signal area than for the originally transmitted data packet.

Claim 51 (new): A method as defined in claim 40, wherein bit rate adaptation is carried out with the aid of a bit rate adaptation algorithm, which punctures or repeats the bits of the data packet or repeat data packet depending on the value of a corresponding rate adaptation parameter ( $e_{ini}$ ), whereby the value of the rate adaptation parameter ( $e_{ini}$ ) is modified for the bit rate adaptation of the bits in the repeat data packet compared to the bit rate adaptation of the bits in the data packet.

Claim 52 (new): A method as defined in claim 51, wherein the bit rate adaptation algorithm is configured such that it selects the bits to be punctured or repeated using an error variable ( $e$ ), whereby said error variable ( $e$ ) is initialized with the value of the rate adaptation parameter ( $e_{ini}$ ) at the start of the rate adaptation algorithm.

Claim 53 (new): A method as defined in claim 40, wherein different bit rate adaptation models are used when several repeat data packets are requested by the receiver for bit rate adaptation of the bits in the individual repeat data packets.

Claim 54 (new): An apparatus to transfer data according to an ARQ method comprising:

a transmitter configured to transfer data to a receiver in the form of data packets,

wherein the transmitter is configured such that, after transmission of a data packet, the transmitter transfers a repeat data packet to the receiver when a corresponding request has been received from the receiver; and

5 a bit rate adaptation unit configured to apply bit rate adaptation to bits to be transferred in the data packet or repeat data packet by the transmitter, including that bit rate adaptation models to be used for bit rate adaptation, including parameters required for calculation of the bit rate adaptation, and effect signaling from the transmitter to the receiver in order to effect a distinction between self-decoding and non-self-decoding data packets.

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Claim 55 (new): An apparatus as defined in claim 54, wherein the bit rate adaptation is further configured to effect signaling of at least two different bit rate adaptation models.

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Claim 56 (new): An apparatus as defined in claim 54, wherein the distinction according to self-decoding and non-self-decoding data packets is signaled only in the case of puncturing, and not in the case of repetition.

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Claim 57 (new): An apparatus as defined in claim 54, wherein different bit rate adaptation models are used for bit rate adaptation of the bits in the repeat data packet and for bit rate adaptation of the bits in the data packet, so that bits with an identical information source are transferred by the transmitter to the receiver after bit rate adaptation is carried out at different places in the data packet and repeat data packet.

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Claim 60 (new): An apparatus as defined in claim 54, wherein the bit rate adaptation unit comprises:

a bit separation unit configured to separate the bits in a channel-coded bit stream into at least two partial bit streams;

at least two bit rate adaptation units allocated to the individual partial bit streams in order to subject the individual partial bit streams to separate bit rate adaptation processes; and

5 a bit collection unit configured to combine the bits from the individual partial bit streams produced by the bit rate adaptation units.

Claim 61 (new): An apparatus to transfer data according to an ARQ method comprising:

10 a transmitter configured to transfer data to a receiver in the form of data packets,

the transmitter configured such that, after transmission of a data packet, a repeat data packet is transferred to the receiver when a corresponding request has been received from the receiver and bits to be transferred in the data packet or repeat data packet are subjected to bit rate adaptation by puncturing or repetition, 15 before they are transferred by the transmitter to the receiver;

wherein the transmitter is further configured to perform the bit rate adaptation according to a bit rate adaptation model, such that the bit rate adaptation model, including parameters for calculation of the bit rate adaptation model, is signaled from the transmitter to the receiver, and, in the case of bit rate adaptation 20 by puncturing, a signal is sent by the transmitter to the receiver to indicate whether a self-decoding or non-self-decoding data packet is being transferred.

Claim 62 (new):. An apparatus as defined in claim 61, wherein, in the case of bit rate adaptation by repetition, no signal is sent by the transmitter to indicate 25 whether a self-decoding or non-self-decoding data packet is being transferred.

Claim 63 (new): An apparatus as defined in claim 61, wherein a transmission resource that is used in the case of puncturing to signal whether a self-decoding or non-self-decoding data packet is being transferred, is used by the 30 transmitter, in the case of repetition, to signal the bit rate adaptation model, including parameters for calculating the bit rate adaptation model.



Claim 64 (new): An apparatus as defined in claim 61, wherein different bit rate adaptation models are used for bit rate adaptation of the bits in the repeat data packet and for bit rate adaptation of the bits in the data packet, so that bits with an identical information source are transferred by the transmitter to the receiver after  
5 bit rate adaptation is carried out at different places in the data packet and repeat data packet.

Claim 65 (new): An apparatus as defined in claim 61, wherein the bit rate  
10 adaptation unit comprises:

a bit separation unit configured to separate the bits in a channel-coded bit stream into at least two partial bit streams;

at least two bit rate adaptation units allocated to the individual partial bit streams in order to subject the individual partial bit streams to separate bit rate  
15 adaptation processes; and

a bit collection unit configured to combine the bits from the individual partial bit streams produced by the bit rate adaptation units.

Claim 66 (new) A receiver to receive data transferred in the form of data  
20 packets according to the method of claim 1, the receiver comprising:

a receiver configured to receive and evaluate a data packet or repeat data packet in order to determine the information content of the data packet by evaluating together the bits received in the data packet and in the repeat data  
packet.

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Claim 67 (new): A method for transferring data according to an ARQ methodology comprising:

transferring data from a transmitter to a receiver in the form of data packets, wherein at least one repeat data packet is transferred to the receiver by the  
30 transmitter after transmission of a data packet when a corresponding request is issued by the receiver;

subjecting bits to be transferred in the data packet or the at least one repeat data packet to bit rate adaptation by puncturing or repetition before they are transferred from the transmitter to the receiver, wherein the bit rate adaptation is carried out according to a bit rate adaptation model; and

5           signaling the bit rate adaptation model, including parameters for calculating the bit rate adaptation model, from the transmitter to the receiver, wherein a signal is sent from the transmitter to the receiver to indicate whether the data packet is self-decoding or non-self-decoding when bit rate adaptation is accomplished by puncturing;

10           wherein the data packet is transferred according to a QPSK modulation or a higher-value modulation, including one of a 16-QAM modulation and 8-PSK modulation,

wherein a mapping rule for the mapping of bits in the data packet to modulation symbols including parameters for describing the mapping rule is signaled from the transmitter to the receiver only in the case of a higher-value modulation, whereby  
15           signaling resources are used for this purpose, which are used in the case of QPSK modulation for signaling the bit rate adaptation model including parameters for calculating the bit rate adaptation model.